MULTIMEDIA UNIVERSITY

STUDENT ID NO

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 2, 2017/2018 SESSION

DBM5028 – BUSINESS FINANCE

(For Diploma Students Only)

14 MARCH 2018
9:00 AM – 11:00 AM
(2 Hours)

INSTRUCTIONS TO STUDENT

1. This question paper consists of **10** pages with 2 sections.
2. For Section A, shade your answers on the OMR sheet provided.
3. For Section B, write your answers in the answer booklet provided.
4. The formulae are given in the appendices.

SECTION A: MULTIPLE CHOICE QUESTIONS (40 marks)

Instruction: Shade your answers on the OMR sheet provided.

1. Jet Qi works with financial assets such as stocks. This is an example of which basic areas of finance?

   A. Stock hedging.
   B. Investment.
   C. Derivatives.
   D. International finance.

2. Raju works for the finance department. He is in charge of cash and credit management. Which of the following is his duty in the company?

   A. Treasurer.
   B. Controller.
   C. Investor.
   D. Shareholder.

3. Richard Lee is in charge to decide what new projects should his company take in the future. Which financial management decision making is involved?

   A. Capital structure.
   B. Capital management.
   C. Capital budgeting.
   D. Working capital management.

4. "Equity capital limited to owner's personal wealth". This statement is **BEST** describing which business disadvantage?

   A. Corporation.
   B. Private company.
   C. Sole proprietorship.
   D. Partnership.

5. Abu Holding plans to build a new corporation but it heard that there are disadvantages if he were to go for corporation business. Which of the following is the **CORRECT** disadvantage?

   A. More capital available.
   B. Tax is charged once.
   C. Double taxation.
   D. Easy to start.

Continued...

6. A corporation goal is to maximise _____ per share and maximise _____ of existing owners' equity.

   A. market price; debt value
   B. current debt; market value
   C. current value; market value
   D. future value; present value

7. There are two major components in the balance sheet. Which of the below are the components?

   A. Assets and net income.
   B. Owner's equity and cash flow.
   C. Assets and liabilities.
   D. Total assets and depreciation.

8. _____ is the balance sheet value of an asset, which based on historical cost.

   A. Current value
   B. Market value
   C. Asset value
   D. Book value

9. Which one of the following is the main focus of a cash flow?

   A. Recognising the company's revenue when it is fully earned.
   B. Showing how cash is generated from utilising the company's assets.
   C. Measuring the performances of the company.
   D. Identifying the amount of debt.

10. Ah Chong's company has recorded a long-term debt of RM100. Their current liability is RM250. Calculate the total liability of his company.

    A. RM50.00
    B. RM150.00
    C. RM250.00
    D. RM350.00

11. Given the firm's total asset is RM800 and their fixed asset is RM280. Calculate the firm's net working capital if their short-term debt is RM50.

    A. RM50.00
    B. RM470.00
    C. RM570.00
    D. RM1030.00

Continued...

12. As an accountant, you are required to calculate the current asset of the company with the below details:

Long-term debt	RM8,000
Total asset	RM10,000
Fixed asset	RM1,800
Net working capital	RM200
Retained earning	RM3,600

A. RM200
B. RM8,200
C. RM9,000
D. RM15,000

13. Eugene Lee wants to know the amount of total tax paid on his taxable income of RM4,500. Based on the data below, calculate the total tax paid.

Taxable Income (RM)	Tax Rate (%)
0 – 2,000	8
2,001 – 4,000	15
4,001 – 6,000	20
6,001 – 8,000	35

A. RM540
B. RM560
C. RM860
D. RM2,000

14. Which one of the following decreases net income but does not affect the operating cash flow of a firm which owes no taxes for the current year?

A. Indirect cost.
B. Direct cost.
C. Noncash item.
D. Period cost.

15. Which one of the following statements related to the income statement is **CORRECT**?

A. Depreciation has no effect on taxes.
B. Interest paid is a noncash item.
C. Taxable income must be a positive value.
D. Net income is distributed either to dividends or retained earnings.

Continued...

16. A company stated a long-term debt of RM800 in 2016 and RM1,800 in 2015. Calculate the cash flow to creditors if its interest paid is RM50.

A. –RM950
B. RM950
C. RM1,000
D. RM1,050

17. Syakila is going to invest RM10 today with 5 percent interest so she can receive RM31.50 in 3 years time. The amount of RM31.50 is referred to as the _____.

A. true value
B. present value
C. future value
D. discounted value

18. The process of money invested multiple by interest rate and years of investment is called _____.

A. interest on interest
B. simple interest
C. discounting
D. compounding

19. Zara is considering to save RM100 in a bank. Which of the following will increase Zara's money?

A. Save in bank that will provide her 10 percent interest for 12 years.
B. Save in bank that will provide her 6 percent interest for 8 years.
C. Save in bank that will provide her 4 percent interest 5 years.
D. Save in bank that will provide her 2 percent interest 6 years.

20. Today, Gina Tan deposited RM2,400 in a bank account that pays 4 percent simple interest. How much interest will Gina Tan earn over the next 5 years?

A. RM96.00
B. RM101.15
C. RM480.00
D. RM519.97

Continued...

21. Bony Goh wants to have RM25,000 for a down payment on a house 6 years from now. If he can earn 6.5 percent, compounded annually on his savings, how much does Bony Goh needs to deposit today to reach his goal?

    A. RM17,133.35
    B. RM17,420.73
    C. RM17,880.69
    D. RM18,211.17

22. How long will it take to double your savings if you can earn 3.6 percent interest, compounded annually?

    A. 17.78 years.
    B. 18.04 years.
    C. 18.67 years.
    D. 19.60 years.

23. Tasha earned RM240 in interest on her savings account last year. Tasha has decided to leave the RM240 in her account so that she can earn interest on the RM240 this year. This process of earning interest on prior interest earnings is called _____.

    A. compounding
    B. discounting
    C. simple interest
    D. amortisation

24. Sharin needs to borrow RM20,000 for 4 years. The loan will be repaid in one lump sum at the end of the loan term. Which of the following interest rate is **BEST** for Sharin?

    A. 8.5 percent simple interest.
    B. 8.5 percent interest, compounded annually.
    C. 9 percent interest, compounded annually.
    D. 8 percent simple interest.

25. Which one of the following commences on the day inventory is purchased and ends on the day the payment for that inventory is collected? Assume all sales and purchases are on credit.

    A. Inventory period.
    B. Accounts receivable period.
    C. Accounts payable period.
    D. Operating cycle.

Continued...

26. By definition, an inventory loan is which one of the following types of loan?

A. Secured short-term loan.
B. Unsecured short-term loan.
C. Secured long-term loan.
D. Unsecured long-term loan.

27. Red and Gold Sdn Bhd has just finished projecting its expected cash receipts and expenditures for next year. What is this projection called?

A. Operating projection.
B. Receivables schedule.
C. Balance sheet.
D. Cash budget.

28. Which one of the following is a use of cash?

A. Selling inventory at cost.
B. Paying a supplier for inventory you purchased last month.
C. Borrowing money from a local bank.
D. Collecting payment from a customer.

29. Which one of the following will increase the operating cycle?

A. Decreasing the days' sales in inventory.
B. Decreasing the inventory turnover rate.
C. Decreasing the accounts payable period.
D. Increasing the accounts receivable turnover rate.

30. Which one of the following is **MOST** apt to decrease the accounts receivable period?

A. Increasing the time granted to customers to pay for purchases.
B. Shortening the cash cycle.
C. Increasing the discount for cash payment.
D. Selling inventory slower.

Continued...

31. Which of the following costs tend to rise when a firm switches to a flexible financial policy from a restrictive financial policy?

I. Restocking costs.
II. Lower prices to offset limited selection.
III. Storage costs.
IV. Current asset opportunity costs.

A. I and II only.
B. III and IV only.
C. I, III and IV only.
D. I, II and III only.

32. Jin Ling Company's has annual sales of RM367,200 and cost of goods sold of RM198,600. The average accounts receivable balance is RM16,400. How many days on average does it take the firm to collect its accounts receivable?

A. 16.08 days.
B. 16.30 days.
C. 17.27 days.
D. 17.50 days.

33. Best Sdn Bhd. generally holds RM100,000 in cash in case if an unexpected investment opportunity arises. Which one of the following is the purpose of holding these cash?

A. Precautionary motive.
B. Opportunistic motive.
C. Speculative motive.
D. Reserve motive.

34. Float is defined as the difference between which of the following?

A. Beginning cash balance and the ending cash balance as shown on a cash budget.
B. Ledger balance and the available balance.
C. Book balance and the ledger balance.
D. Collections and disbursements for any given period of time.

35. Which one of the following is the bill given to a customer for goods he or she purchased?

A. Account aging.
B. Shipping receipt.
C. Remittance advice.
D. Invoice.

Continued...

36. Which one of the following is a system for managing demand-dependent inventories that minimises the amount of inventory on hand?

A. Just-in-time inventory system.
B. Inventory flow log.
C. Materials requirements planning.
D. Keiretsu.

37. To minimise collection float, a firm should do which of the following?

I. Deposit its collections at least daily.
II. Make sure all checks it receives at the sales counter are properly dated and signed.
III. Pay its bills in a more timely manner.
IV. Eliminate its regional lockboxes and only have one central lockbox located near the firm's home office.

A. I and II only.
B. III and IV only.
C. II, III and IV only.
D. I, II and III only.

38. When are funds generally transferred into zero-balance accounts?

A. Monthly.
B. Weekly.
C. Daily.
D. As needed.

39. Which one of the following characteristics generally applies to commercial paper?

A. Issued only by financial institutions.
B. Unsecured.
C. Issued only by corporations.
D. Maturities limited to 90 days or less.

40. A firm grants credit with terms of 2/5, net 20. The firm's customers have _____ days to pay in order to receive a _____ percent discount.

A. 15; 2
B. 20; 2
C. 5; 2
D. 2; 5

[TOTAL 40 MARKS]

Continued...

SECTION B: STRUCTURED QUESTIONS (60 marks)

Instruction: Write all your answers in the answer booklet provided.

QUESTION 1

a. Priya has just started to work in a financial company that is located in Melaka and she is planning to save RM100 per month from her salary for the next 8 years.

   i. How much does her saving worth at the end of year 8 if she expects the earning is going to be 4 percent?

   (4 marks)

   ii. Priya is also considering to make an investment which will produce cash inflows of RM500 in year one, RM650 in year two and RM755 in year three. How much does Priya need to invest in order for her to receive these cash flow with the rate of return of 5 percent?

   (4 marks)

b. Nini took out a 4.5 percent interest-only loan of RM15,000 for 3 years. Construct a repayment table to show the amount of the payment that will be due at the end of year 4.

   (3 marks)

c. Reague Corp. is considering to purchase a new sorting machine. The quotation consists of a quarterly payment of RM29,600 for 7 years at 8 percent interest. What is the purchase price of the equipment?

   (4 marks)

(TOTAL 15 MARKS)

QUESTION 2

Scope Industries Inc. announces RM5 million debt issue of 20 years bonds to fund the new project. The face value of the bond is RM1,000 and makes semi-annual coupon payments. The coupon rate is 6 percent and investor required rate of return is 9 percent.

a. Calculate the bond price.

   (7.5 marks)

b. What is the current yield?

   (2 marks)

c. Is the bond selling at par, premium or discount? Why?

   (1 mark)

d. How many bonds should the company sell to fulfill the fund required for the new project?

   (2 marks)

e. If the company plans to issue 10 years zero coupon bonds with the face value of RM1,000 and required rate of return of 5 percent, what is the price should the company charge for these bonds?

   (2.5 marks)

(TOTAL 15 MARKS)

Continued...

QUESTION 3

Hibiscus Inc. has been at a phenomenal growth rate of 30 percent per year because of its rapid expansion and explosive sales. As an investor, you believe this growth rate will last for three more years and will then drop to 10 percent per year indefinitely. The company just a paid dividend of RM0.78 per share and the required rate of return for this stock is 20 percent.

a. What is the value of the stock today?

(10.5 marks)

b. Calculate the stock price at year 5.

(2 marks)

c. If the company offer to sell a preferred stock at RM15 per share with constant dividend of RM1.80 per share indefinitely, are you willing to invest if your required rate of return is 15 percent? Why?

(2.5 marks)
(TOTAL 15 MARKS)

QUESTION 4

a. Hidayah who is the project manager for Wani Holdings is given the responsibility to choose between Project V and Project X. The projects are mutually exclusive. Project V costs the company RM8,000 and has cash flows of RM4,000 in each of the next 3 years. Project X also costs RM8,000, and generates cash flows of RM4,500, RM4,000 and RM2,500 for the next 3 years, respectively. Which investment should she choose if the cost of capital is 15 percent?

(10 marks)

b. Moo Tai's company is planning to buy a new furniture for the new office. This furniture's cost is around RM500,000 and will generate the following net income amounts. The company's depreciation value will be zero.

Year	1	2	3	4
Net income	RM20,000	RM28,000	RM8,000	RM5,000

Calculate:

i. Average net income.

(3 marks)

ii. Average book value

(2 marks)
(TOTAL 15 MARKS)

End of Page.

Appendices

I. The cash flow identity

Cash flow from assets = Cash flow to creditors (bondholders)
+ Cash flow to stockholders (owners)

II. Cash flow from assets

Cash flow from assets = Operating cash flow
− Net capital spending
− Change in net working capital (NWC)

where

Operating cash flow = Earnings before interest and taxes (EBIT)
+ Depreciation − Taxes

Net capital spending = Ending net fixed assets − Beginning net fixed assets
+ Depreciation

Change in NWC = Ending NWC − Beginning NWC

III. Cash flow to creditors (bondholders)

Cash flow to creditors = Interest paid − Net new borrowing

IV. Cash flow to stockholders (owners)

Cash flow to stockholders = Dividends paid − Net new equity raised

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I. Symbols

PV = Present value, what future cash flows are worth today
FV_t = Future value, what cash flows are worth in the future
r = Interest rate, rate of return, or discount rate per period typically , but not always, one year
t = Number of periods typically , but not always, the number of years
C = Cash amount

II. Future value of *C* invested at *r* percent per period for *t* periods

$FV_t = C \times (1 + r)^t$

The term $(1 + r)^t$ is called the *future value factor.*

III. Present value of *C* to be received in *t* periods at *r* percent per period

$PV = C/(1 + r)^t$

The term $1/(1 + r)^t$ is called the *present value factor.*

IV. The basic present value equation giving the relationship between present and future value is

$PV = FV_t/(1 + r)^t$

I. Symbols

PV = Present value, what future cash flows are worth today
FV_t = Future value, what cash flows are worth in the future at time t
r = Interest rate, rate of return, or discount rate per period typically , but not always, one year
t = Number of periods typically , but not always, the number of years
C = Cash amount

II. Future value of *C* invested per period for *t* periods at *r* percent per period

$FV_t = C \times [(1 + r)^t - 1]/r$

A series of identical cash flows is called an annuity, and the term $[(1 + r)^t - 1]/r$ is called the *annuity future value factor.*

III. Present value of *C* per period for *t* periods at *r* percent per period

$PV = C \times \{1 - [1/(1 + r)^t]\}/r$

The term $\{1 - [1/(1 + r)^t]\}/r$ is called the *annuity present value factor.*

IV. Present value of a perpetuity of *C* per period

$PV = C/r$

A perpetuity has the same cash flow every year forever.

I. Finding the value of a bond

Bond value = $C \times [1 - 1/(1 + r)^t]/r + F/(1 + r)^t$

where

C = Coupon paid each period
r = Rate per period
t = Number of periods
F = Bond's face value

II. Finding the yield on a bond

Given a bond value, coupon, time to maturity, and face value, it is possible to find the implicit discount rate, or yield to maturity, by trial and error only. To do this, try different discount rates in the formula above until the calculated bond value equals the given bond value. Remember that increasing the rate *decreases* the bond value.

I. The general case

In general, the price today of a share of stock, P_0, is the present value of all of its future dividends, $D_1, D_2, D_3, \ldots$:

$$P_0 = \frac{D_1}{(1 + R)^1} + \frac{D_2}{(1 + R)^2} + \frac{D_3}{(1 + R)^3} + \cdots$$

where R is the required return.

II. Constant growth case

If the dividend is constant and equal to D, then the price can be written as:

$$P_0 = \frac{D}{R}$$

If the dividend grows at a steady rate, g, then the price can be written as:

$$P_0 = \frac{D_1}{R - g}$$

This result is called the *dividend growth model.*

III. Nonconstant Growth

If the dividend grows steadily after t periods, then the price can be written as:

$$P_0 = \frac{D_1}{(1 + R)^1} + \frac{D_2}{(1 + R)^2} + \cdots + \frac{D_t}{(1 + R)^t} + \frac{P_t}{(1 + R)^t}$$

where

$$P_t = \frac{D_t \times (1 + g)}{(R - g)}$$

IV. Valuation Using Multiples

For stocks that don't pay dividends (or have erratic dividend growth rates), we can value them using the PE ratio and/or the price-sales ratio:

P_t = Benchmark PE ratio × EPS_t
P_t = Benchmark price-sales ratio × Sales per share$_t$

V. The required return, R, can be written as the sum of two things:

$$R = D_1/P_0 + g$$

where D_1/P_0 is the *dividend yield* and g is the *capital gains yield* (which is the same thing as the growth rate in dividends for the steady growth case).

I. Operating cycle = Inventory period + Accounts receivable period

II. Cash cycle = Operating cycle $- \left[\frac{365 \text{ days}}{\left(\frac{\text{COGS}}{\text{Average accounts payable}}\right)}\right]$

III. Inventory period = $\frac{365 \text{ days}}{\left[\frac{\text{COGS}}{\text{Average inventory}}\right]}$

IV. Accounts receivables period = $\frac{365 \text{ days}}{\left[\frac{\text{Credit sales}}{\text{Average accounts receivables}}\right]}$

V. Accounts receivable turnover = $\frac{\text{Credit sales}}{\text{Average accounts receivable}}$

VI. Accounts payable period = $\frac{365 \text{ days}}{\left[\frac{\text{COGS}}{\text{Average accounts payable}}\right]}$